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5. Principal HMPT Safety Organizations

5.1 Introduction

HMPT Safety Member Organizations The functions of the HMPT safety organizations and other organizations providing support for HMPT Safety Program are described in this section and shown in **Figure 4-2**.

All member organizations of the HMPT Safety Program are responsible and accountable for different aspects of onsite hazardous materials packaging and transportation. The three principal members of the HMPT Safety Committee are the Materials Management Section (MMS), Hazardous Waste Management (HWM) Division, and the Materials Distribution Division (MDD). The Plant Engineering Department, the Hazards Control Department, and Site 300 also have representatives on the HMPT Safety Committee. The Traffic Manager is staff to the Material Distribution Division Leader. The HMPT Assurance Officer reports directly to the Committee chairperson.

5.2 Materials Management Section

MMS and Category 1 Hazardous Materials The Materials Management Section (MMS) of the Applied Research Engineering Division is responsible for developing and maintaining guidance for the onsite packaging and transfer of Category 1 Hazardous Materials. MMS manages the material control and accountability system for the Laboratory's DOE controlled materials.

As part of the HMPT Safety Program, MMS is responsible for and authorized to:

- Provide packaging and transfer services for Category 1 Hazardous Materials
- Provide technical guidance to LLNL Programs and personnel for the packaging of Category 1 materials for onsite transfer
- Receiving and distributing Category 1 hazardous materials.

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MMS Onsite Safety Responsibilities

For the onsite packaging and transfer of Category 1 Hazardous Materials, MMS:

- Establishes a system of procedures and controls for the safe and efficient transfer of controlled materials in the possession of LLNL
- Performs packaging and transfer of Category 1 materials
- Provides technical guidance to Laboratory personnel involved in packaging and onsite transfer operations for Category 1 Hazardous Materials
- Assures that controlled materials to be transported are correctly packaged for transfer
- Approves onsite transfer policies developed and issued by LLNL
- Provides overall management for accountability and day-to-day control of Category 1 Hazardous Materials
- Reviews operational and facility procedures governing packaging and onsite transfers of Category 1 Hazardous Materials
- Ensures safe operation of the commercial motor vehicles under its control
- Issues and implements the MMS QA Plan for Hazardous Material Packaging and Transportation (See **Section 14.4**)
- Trains MMS personnel.

5.3 Hazardous Waste Management Division

HWM Division and Category 2 Hazardous Materials HWM Division in the Environmental Protection Department (EPD) is responsible for developing and maintaining guidance for packaging of Category 2 Hazardous Materials. HWM manages all hazardous, radioactive, explosive, and mixed wastes generated at all Laboratory facilities. Operationally, HWM Division staff processes these wastes for temporary storage, treats the waste, or transports the waste for either recycling or offsite disposal.

As part of the HMPT Safety Program, the HWM Division is responsible for and authorized to provide guidance on:

• Packaging to generators of Category 2 Hazardous Materials

- Transfer of Category 2 Hazardous Materials by the MMS
- Packaging and transfer of wastes that the HWM Division generates during waste processing activities.

HWM Division's Onsite HMPT Safety Responsibilities

For onsite packaging and transfer of these materials, HWM Division:

- Establishes a system of guidance and controls for the safe and efficient transfer of Category 2 Hazardous Materials in the possession of LLNL
- Provides technical guidance to LLNL personnel involved in packaging and onsite transfer operations of Category 2 Hazardous Materials
- Assures that Category 2 Hazardous Materials to be transported are correctly packaged for transfer before pickup
- Approves onsite transfer policies developed and issued by LLNL for Category 2 Hazardous Materials
- Provides overall management and day-to-day control of Category 2 Hazardous Materials at HWM Division facilities
- Reviews operational and facility procedures governing packaging and onsite transfers of hazardous wastes generated at HWM Division facilities
- Ensures safe operation of the commercial motor vehicles under its control
- Issues and implements the HWM Division QA Plan which addresses Hazardous Material Packaging and Transportation
- Trains HWM Division personnel
- Provides field Hazardous Waste Technicians to the Environmental, Safety, and Health (ES&H) Teams (see Section 5.6 below) to provide guidance to programmatic personnel in the packaging of Category 2 Hazardous Materials.

5.4 Materials Distribution Division

MDD and Category 3 Hazardous Materials

The Materials Distribution Division (MDD) has the responsibility and authority for:

 Providing transportation services to MMS for the transfer of Category 1 Hazardous Materials, if requested

- Providing transportation services to HWM Division for the transfer of Category 2 Hazardous Materials when requested
- Receiving and distributing Category 3 Hazardous Materials.

MDD's Onsite HMPT Safety Responsibilities

For onsite packaging and transfer of these hazardous materials, MDD is responsible for:

- Establishing a system of procedures and controls for the safe and efficient receipt and distribution of Category 3 Hazardous Materials onsite
- Assuring that Category 3 Hazardous Materials received from offsite meet DOT containment and communication requirements so that they can be transferred safely
- Approving onsite transfer policies developed and issued by LLNLfor Category 3 Hazardous Materials
- Providing transportation services to users of Category 3 Hazardous Materials
- Ensuring safe operation of the commercial motor vehicles under its control
- Issuing and implementing the MDD QA Plan for Hazardous Material Packaging and Transportation (See **Section 14.4**)
- Training MDD personnel.

5.5 Plant Engineering Department

Plant Engineering's HMPT Safety Responsibilities

The Plant Engineering Department has responsibility and authority for:

- Transferring onsite Category 3 Hazardous Materials required for normal Plant Engineering operations (materials of trade)
- Ensuring safe operation of the commercial motor vehicles under its control
- Providing assistance to other HMPT Safety organizations in moving large or heavy items that require special handling equipment.

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5.6 Hazards Control Department

Hazards Control's HMPT Safety Responsibilities The Hazards Control Department (Hazards Control) is responsible for developing and maintaining safety standards for onsite transfer of hazardous materials, substances, and wastes, and for providing guidance in their application.

Hazards Control is responsible for:

- Establishing safety procedures and controls for safe and efficient operations and research at the Laboratory, as per the LLNL Health and Safety Manual
- Monitoring packaging and transfer operations for compliance with occupational safety regulations
- Responding to emergency situations and incidents involving hazardous materials, substances, and wastes
- Providing liaison, safety guidance, and safety services to personnel involved with packaging and transfer operations
- Providing and coordinating Hazards Control's ES&H Teams
- Coordinating with the LLNL Fire Department
- Training LLNL and Hazards Control safety personnel
- Selecting, obtaining, calibrating, distributing, and maintaining all portable radiation detecting instruments.
- Monitoring radiation and other hazardous materials, substances, and wastes.
- Operating analytical laboratories
- Collecting and reporting safety data

Hazards Control also maintains programs for monitoring the work environment to assure the doses remain below applicable radiationprotection standards. These monitoring programs include monitoring and sampling for airborne radioactivity, surveying for surface contamination, and monitoring ambient radiation fields.

Role of Field Safety Teams

Hazards Control, through its Field Safety Teams, assists supervisors and employees in maintaining safe work areas and practices by providing information on the hazardous properties of materials, recommending methods for mitigating the hazards, and monitoring the work environment.

Composition of ES&H Teams

ES&H Teams in the Hazards Control Department directly interface with programmatic personnel, researchers, other users of hazardous materials, substances, and wastes, and waste generators. Four safety teams are each composed of a Safety Team Leader who coordinates the team's activities, Health and Safety Technicians, a Hazardous Waste Technician, and one or more discipline representatives from the following environmental and safety disciplines:

- Criticality Safety
- Explosives Safety
- Fire Protection Engineering
- Health Physics
- Industrial Hygiene and Toxicology
- Industrial Safety
- Environmental Protection.

5.7 Traffic Manager

Responsibilities for Hazardous Materials Shipments Control of LLNL's offsite shipments of hazardous materials, substances, and wastes via LLNL, contract, and common carriers is the responsibility of the LLNL Traffic Manager. The Traffic Manager also interfaces with jurisdictional authorities and commercial carriers in the offsite shipment of hazardous materials, substances, and wastes.

The Traffic Manager has "go/no-go" authority for offsite shipments of hazardous materials, substances, and wastes, but has no direct operational responsibility for the onsite transportation of hazardous materials, substances, and wastes, but may provide regulatory guidance.

5.8 Environmental Protection Department

Compliance Role of EPD

In addition to HWM Division, EPD provides other support to LLNL. It ensures that the Laboratory can meet its environmental responsibilities as stipulated in environmental legislation, regulations, and DOE Orders, and collaborates with LLNL programs to maintain adequate protection for the environment.

Other EPD responsibilities related to the HMPT program include:

- Developing and maintaining LLNL environmental policies, plans, guidelines and practices
- Representing the Laboratory to the public and to federal, state, and local regulatory agencies on environmental issues
- Educating and training LLNL employees on environmental issues and responsibilities
- Informing management about pending changes in regulations impacting the Laboratory
- Guiding programs in complying with environmental laws and regulations
- Helping programs manage and minimize hazardous and radioactive waste
- Performing environmental monitoring of LLNL operations
- Determining the extent of environmental contamination from past activities
- Cleaning up environmental contamination to acceptable standards
- Responding to emergencies that impact the environment and providing guidance for cleanup, sampling, and reporting
- Auditing programs and facilities for compliance with LLNL, federal, state, and local environmental policies and regulations.

EPD's Environmental Analysts

EPD provides Environmental Analysts to the Hazards Control's ES&H Teams (see **Section 5.6**) and may provide guidance to programmatic personnel in the packaging of Category 2 Hazardous Materials and in compliance with environmental regulations.

As members of the Safety Teams, Environmental Analysts respond to emergency situations and incidents involving hazardous materials, substances, and wastes.

For More Information

LLNL's environmental protection program is described in greater detail in the *Environmental Protection Handbook* and supporting procedures.

5.9 Other Organizations Supporting HMPT Safety Activities

LLNL Assurance Office

If requested, the LLNL Assurance Office may provide guidance to the HMPT Safety Committee on management of QA appraisals and corrective action. If requested, the Assurance Office may also provides guidance to MMS, MDD, HWM Division, and MDD on preparation and maintenance of individual quality assurance and quality control programs. (Refer to "Hazardous Material Packaging and Transportation QA Program" section.)

Riggers from the Plant Engineering Department

The transfer of hazardous materials, substances, and wastes often requires transportation within heavy shielding and/or shipping containers. Also, the removal of large waste items, such as discarded tanks, require special moving equipment. The riggers from the Plant Engineering Department use cranes, hoists, or forklifts to move heavy items when requested by, and under the guidance of, the MMS or the HWM Division. The guidelines for use of these lifting devices are contained in the *LLNL Health and Safety Manual*.

Container Design, Modification, or Repair Services from Plant Engineering

MMS, MDD, or HWM Division, in an emergency, may request Plant Engineering to assist in the design, modification, or repair of containers for non-routine hazardous material transfers. The requesting organization must approve these containers prior to their use.

Protective Force Division

In addition to enforcing traffic policies onsite, the Protective Force Division within Safeguards and Security provides escorts for onsite transfers of DOE Safeguards Category I and II quantity materials. Business Services Department's Fleet Management The Fleet Management Group provides routine maintenance on all transportation vehicles. The Fleet Management Group also inspects and approves new explosives transportation vehicles prior to placing the vehicle in service and inspects incoming commercial vehicles delivering explosives to Site 300.

5.10 Users and Generators of Hazardous Material, Substances, and Waste

Responsibilities of Users and Generators of Hazardous Materials Programmatic personnel, researchers, and other users of hazardous materials and substances, and hazardous wastes; and waste generators are responsible for:

- Notifying MMS concerning transfers of Category 1 Hazardous
 Materials (except explosives at Site 300) and providing MMS with
 the required information and documentation. MMS either packages
 the material, supplies the container, or advises the user as to correct
 packaging methods
- Providing personnel qualified to handle explosives, as per the *LLNL Health and Safety Manual*, Supplement 24.03
- Packaging and transporting explosives in explosives-qualified vehicles, according to the provisions of the *Site 300 Safety and Operational Manual* and this *HMPT Safety Manual*.
- Packaging Category 2 Hazardous Materials in accordance with "The Preparation Guide for Generators of Hazardous Chemicals and Radioactive Waste at LLNL," from the *LLNL Environmental* Protection Handbook and HWM Division's waste acceptance criteria
- Packaging and transferring Category 3 Hazardous Materials that are required for research and normal operations in quantities above 1 gal (unless otherwise specified) in accordance with this manual and the LLNL Health and Safety Manual
- Packaging and transferring Category 3 Hazardous Materials required for research and normal operations in quantities of 1 gal or below (unless otherwise specified) in accordance with regulations of the Occupational Safety and Health Administration (OSHA) and good management practices.

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